

Wednesday 10th June

The Sumdog competition continues so before you tackle the questions and investigation below, login to <https://pages.sumdog.com/> using your Mymaths login and password and take part!

Fluent in five!

Remember to think first as to whether you need to use a written method (W), or a mental method (m).

Check your answers, and if you made any mistakes, see if you can work out what you did wrong.

$$A. 984 + 70 =$$

$$B. 64,326 - 14,168 =$$

$$C. 654.43 \times 10 =$$

$$D. ? = 743 \div 7$$

$$E. 993 + ? = 1,113$$

Q1 This is a weather report from the radio:

"The temperature in Dundee will average 3°C . The temperature in Glasgow will be 5°C lower than Dundee. The temperature in London will be 8°C higher than Glasgow."

a What will the temperature be in Glasgow today?

1 mark

b What will the temperature be in London today?

1 mark

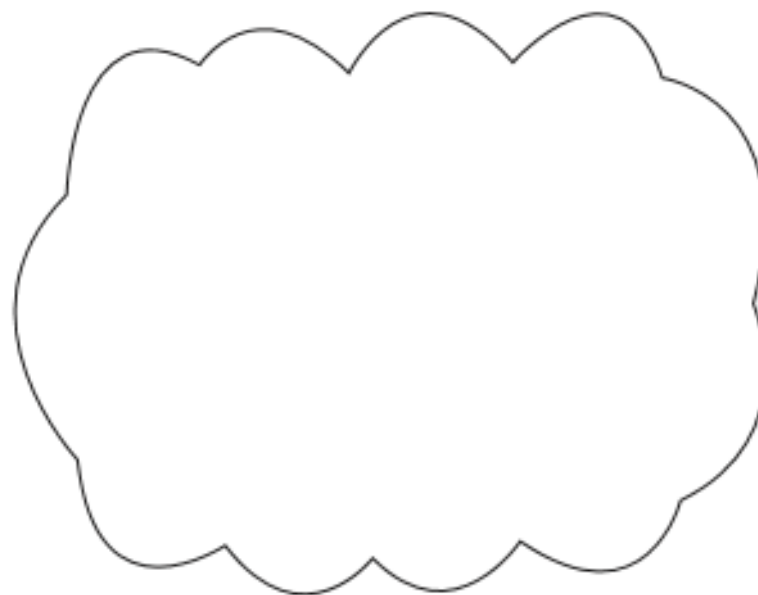
Q2 Gracie and Evie each start with the same number.

Gracie rounds the number to the nearest hundred.

Evie rounds the number to the nearest ten.

Gracie's answer is double Evie's answer.

Explain how this could be.



1 mark

Q3 Class 6 gets through $\frac{3}{4}$ of a packet of glue sticks per table each year.

There are six tables in the class.

How many boxes of glue sticks does the class get through altogether?

Give your answer as a mixed number.

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1 mark

Investigation Time!

Remember, $\text{factor} \times \text{factor} = \text{product}$

$\text{Product (number)} \div \text{factor} = \text{factor}$

Draw factor bugs if it helps!

11 Fun factory

The number 8 has four factors: 1, 2, 4 and 8.

When you divide 8 by 1, 2, 4 or 8 the remainder is always 0.

1. What about the number 11 - how many factors does it have?
2. Make a list of the numbers from 2 to 20. Write the factors of each number?
3. Which numbers have two factors only? Which numbers have three factors only? Which numbers have most factors? Are there any numbers with no factors?
4. Investigate numbers that are bigger than 20 and discuss/write down your conclusions.

Answers

$$\text{A. } 984 + 70 = 1,054 \text{ (M)}$$

$$\text{B. } 64,326 - 14,168 = 50,158 \text{ (W)}$$

$$\text{C. } 654.43 \times 10 = 6544.3 \text{ (M)}$$

$$\text{D. } 106 \text{ r } 1 \text{ or } 106 \text{ r } \frac{1}{7} = 743 \div 7 \text{ (W)}$$

$$\text{E. } 993 + 120 = 1,113 \text{ (M)}$$

Q1 This is a weather report from the radio:

“The temperature in Dundee will average 3°C. The temperature in Glasgow will be 5°C lower than Dundee. The temperature in London will be 8°C higher than Glasgow.”

a What will the temperature be in Glasgow today?

-2°C

1 mark

b What will the temperature be in London today?

6°C

1 mark

Q2 Gracie and Evie each start with the same number.

Gracie rounds the number to the nearest hundred.

Evie rounds the number to the nearest ten.

Gracie’s answer is double Evie’s answer.

Explain how this could be.

Here are 3 example answers.

- 53 to the nearest hundred is 100, and to the nearest ten is 50 and $2 \times 50 = 100$.
- If it’s 50 or more but less than 55 it will round to 100 (nearest hundred) and 50 (nearest ten) and 100 is double 50.
- 51 rounds to 50 and 100.

1 mark

Q3 Class 6 gets through $\frac{3}{4}$ of a packet of glue sticks per table each year.

There are six tables in the class.

How many boxes of glue sticks does the class get through altogether?

Give your answer as a mixed number.

$$\boxed{4} \frac{\boxed{1}}{\boxed{2}}$$

1 mark

11 Fun factory

The number 8 has four factors: 1, 2, 4 and 8.

When you divide 8 by 1, 2, 4 or 8 the remainder is always 0.

1. What about the number 11 - how many factors does it have?
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3. Which numbers have two factors only? Which numbers have three factors only? Which numbers have most factors? Are there any numbers with no factors?
4. Investigate numbers that are bigger than 20 and discuss/write down your conclusions.

1. Two factors. 1 and 11.

2. 2	2 and 1	11	11 and 1
3	3 and 1	12	12 and 1, 2 and 6, 4 and 3
4	4 and 1 and 2	13	13 and 1
5	5 and 1	14	14 and 1, 2 and 7
6	6 and 1, 2 and 3.	15	15 and 1, 5 and 3
7	7 and 1	16	16 and 1, 8 and 2 and 4
8	8 and 1, 2 and 4	17	17 and 1
9	9 and 1 and 3	18	18 and 1, 2 and 9
10	10 and 1, 2 and 5	19	19 and 1
		20	20 and 1, 2 and 10, 5 and 4